

VERSION DESCRIPTION DOCUMENT FOR THE NASA EQUIPMENT MANAGEMENT SYSTEM (NEMS)

Release 5.1.1

NASA-NEMS-VDD-13

PrISMS Contract

September 27, 2002



National Aeronautics and
Space Administration

George C. Marshall Space Flight Center
Huntsville, AL 35812

**VERSION DESCRIPTION DOCUMENT FOR THE
NASA EQUIPMENT MANAGEMENT SYSTEM (NEMS)
RELEASE 5.1.1**

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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
GEORGE C. MARSHALL SPACE FLIGHT CENTER
HUNTSVILLE, ALABAMA

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GEORGE C. MARSHALL SPACE FLIGHT CENTER
HUNTSVILLE, ALABAMA

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1. INTRODUCTION

This Version Description Document (VDD) describes the changes and installation procedures for this release of the NASA Equipment Management System (NEMS). This section identifies the release, describes its purpose, defines its scope, and identifies its contact points.

1.1 IDENTIFICATION OF THE RELEASE

This software release is identified as NEMS, Release 5.1.1 and has an effective release date of September 27, 2002.

1.2 PURPOSE OF THE RELEASE

This release implements modifications for the following Change Control Requests (CCRs):

<u>CCR</u>	<u>Title</u>
336	Search by user/custodian name on NEMS Web Front-end

This release implements modifications necessitated by the following Discrepancy Reports (DRs):

<u>CCR</u>	<u>Title</u>
None	

1.3 SCOPE

This VDD provides the functional and technical user of NEMS with information regarding the content, status, and structure of Release 5.1.1, including the following:

- Changes implemented since Release 5.1;
- Validation procedures to ensure the reliability of release changes;
- References to other documentation affected by this release;
- Detailed software installation instructions.

No waivers are associated with this release.

1.4 CONTACT POINTS

Sustaining Engineering for NEMS is provided through the Consolidation Center (CC) located at Marshall Space Flight Center (MSFC). Questions regarding the functional and/or the technical aspects as well as the installation of this release should be directed to:

The NACC Technical Services Center (Use following Key Words: SESAAS & NEMS)

Telephone: (256) 544-6673
Email: neal.cantrell@msfc.nasa.gov
FAX: (256) 544-1836

2. FUNCTIONAL INFORMATION

This section includes details regarding functional changes, functional interfaces, critical issues, affected documents, and application system administration.

2.1 FUNCTIONAL CHANGES

Please refer to Appendix C, Functional Change Validation Procedures, for a description of all functional changes related to this release. Appendix D, Installation Instructions, describes all Software PREDICT changes related to this release.

2.2 FUNCTIONAL INTERFACES

This section is not applicable for this release.

2.3 CRITICAL ISSUES

This section is not applicable for this release.

2.4 AFFECTED DOCUMENTS

The following documents were changed for this release:

NEMS Web Front End User Guide

2.5 APPLICATION SYSTEM ADMINISTRATION

There are no application system administration changes associated with this release.

3. TECHNICAL INFORMATION

This section includes details regarding technical system interfaces, data dictionary changes, software object changes, and database administration activities.

3.1 TECHNICAL SYSTEM INTERFACES

This section is not applicable with this release.

3.2 DATA DICTIONARY CHANGES

Refer to Appendix D, Section 4.0, for the data dictionary changes in this release.

3.3 SOFTWARE OBJECT CHANGES

Modules affected by this release are included in Appendix D, Section 2.2.

3.4 DATABASE ADMINISTRATION

This section describes the database administration activities for installation of this release.

3.4.1 Release Dataset Names

Refer to Appendix D, Introduction section, for the release dataset names.

3.4.2 Inventory of Objects

Refer to Appendix D, Section 2.1, for an inventory of Natural object types.

3.4.3 Storage Considerations

The changes represented by this release should not affect storage requirements.

3.4.4 Installation Procedures

Refer to Appendix D, Installation Instructions for NEMS Software Release 5.1.1 for detailed software installation procedures.

3.5 OPERATIONAL PREPARATION

Refer to the procedure described in Appendix D for assistance in preparing for proper installation and operational use of this release.

4. KNOWN AND OPEN PROBLEMS

There are no known or open problems related to this release.

APPENDIX A - ABBREVIATIONS AND ACRONYMS

CC	Consolidation Center
CCR	Change Control Request
CSC	Computer Sciences Corporation
DBA	Database Administrator
DR	Discrepancy Report
FAX	Electronic Facsimile Transmission
IRM	Information Resources Management
JCL	Job Control Language
MSFC	Marshall Space Flight Center
NACC	NASA Automated Data Processing (ADP) Consolidation Center
NASA	National Aeronautics and Space Administration
NEMS	NASA Equipment Management System
NPDMS	NASA Property Disposal Management System
SESAAS	Sustaining Engineering Support for Agencywide Administrative Systems
VDD	Version Description Document

APPENDIX B - GLOSSARY

Database Administration

Responsibility for maintaining the physical database environment.

Implementation

The process by which a NASA site installs a NASA software release and places it into operational use.

Operational Preparation

Preparation by a NASA site for installation and use of a NASA application release.

System Administration

Responsibility for administrative functions such as application security and table data maintenance associated with a NASA application.

APPENDIX C - FUNCTIONAL CHANGE VALIDATION PROCEDURES

Index of validation procedures for changes in this release:

Section	CCR	Title
----------------	------------	--------------

1.0	336	Search by user/custodian name on NEMS Web Front-end
-----	-----	---

Details for the validation procedures follow:

1.0 CCR 336 – Search by user/custodian name on NEMS Web Front-end

Most times the user does not know the user/custodian number, but does know their name. Would like to be able to search by user/custodian name.

Description of Change

Code was changed allow searching by user/custodian name and building name.

Functional Impact

There is no functional impact as a result of this CCR.

Validation Procedures

- Select the Bldgs Name push button on the ECN Detail screen.
Expected Result: A List of Buildings by Building Name will be displayed.
 - Enter a Starting Building Name and press the SUBMIT push button.
Expected Result: The List of Buildings will be repositioned to the Building Name entered (if there is an exact match) or the next Building Name (if there is not an exact match).
 - Press the NEXT PAGE button (this button will be displayed only if there are more Buildings to be displayed).
Expected Result: The Building List will be redisplayed starting with the last Building from the previous page.
 - Click on either the Building Number or Building Name.
Expected Result: The Building Number will be passed back to the List of Equipment screen in the New Building field.
- Select the User Name push button on the ECN Detail screen
Expected Result: A List of Users by User Name will be displayed.
 - Enter a Starting User Name and press the SUBMIT push button.
Expected Result: The List of Users will be repositioned to the User Name entered (if there is an exact match) or the next User Name (if there is not an exact match).
 - Press the NEXT PAGE button (this button will be displayed only if there are more Users to be displayed).
Expected Result: The Users List will be redisplayed starting with the last User from the previous page.
 - Click on either the User ID or User Name.
Expected Result: The User ID will be passed back to the List of Equipment screen in the New UserID field.
- Select the Custodian Name push button on the View List of Equipment Assigned to You – Detail screen.
Expected Result: A List of Custodians by Custodian Name will be displayed.
 - Enter a Starting Custodian Name and press the SUBMIT push button.
Expected Result: The List of Custodians will be repositioned to the Custodian Name entered (if there is an exact match) or the next Custodian Name (if there is not an exact match).
 - Press the NEXT PAGE button (this button will be displayed only if there are more Custodians to be displayed).

Expected Result: The Custodians List will be redisplayed starting with the last Custodian from the previous page.

- Click on either the Custodian ID or Custodian Name.

Expected Result: The Custodian ID will be passed back to the List of Equipment screen in the New Custodian field.

<u>MODULE ID</u>	<u>MODULE NAME</u>	<u>TYPE</u>
<u>NEMS</u>		
NEWLBUN2	List All Buildings by Name	Subpgm
NEWLCUN2	List All Custodians by Name	Subpgm
NEWLUSN2	List all Users by Name	Subpgm

APPENDIX D - INSTALLATION INSTRUCTIONS AND CHECKLIST FOR NEMS SOFTWARE RELEASE 5.1.1

Introduction

Release information:

System Name: NEMS
Release Number: 5.1.1
Release Date: September 27, 2002
Effective Date: Immediately

In case of installation problems, contact the NASA Automated Data Processing (ADP) Consolidation Center (NACC) Technical Services Center (Use following Key Words: SESAAS & NEMS)

Telephone: (256) 544-6673
Email: neal.cantrell@msfc.nasa.gov
FAX: (256) 544-1836

*** IMPORTANT NOTE ***

All release datasets must be deleted from the transient storage DASD volumes within 1 month of the release date. Failure to delete release datasets could negatively impact NPPS production.

The following datasets are located on the transient storage DASD volumes under the following data sets names:

xxMOV.NEMS.PROD.R511.R0902.PRD
xxMOV.NEMS.PROD.R511.R0902.SRC

Where "xx" is replaced by the appropriate NASA Center designation.

AR - ARC
DF - DFRC
GS - GSFC
HQ - HQ
J5 - JSC
KS - KSC
LA - LaRC
LE - GRC (Glenn)
MS - MSFC
SS - SSC

Installation Sequence

The sequence in which the installation of this release should occur is provided in the following list. A checklist is provided in section 9.0 to assist in tracking the installation of this release.

- 1.0 Back Up Existing Data
- 2.0 Copy Source
- 3.0 Pre-Predict Data Conversion
- 4.0 Install Predict
- 5.0 Catalog Source Code
- 6.0 Post-Predict Data Conversion
- 7.0 Perform Release-Specific Procedures
- 8.0 Local JCL Mods
- 9.0 Installation Checklist

1.0 Back Up Existing Data

It is advisable to back up all NEMS files as a precautionary measure prior to installation.

2.0 Copy Source

2.1 Copy Source Code

- A. Source code is installed in three separate libraries. Source code for programs modified in this release version were unloaded in the NATUNLD format, these programs all have specific destination libraries as shown below. All the NEMS programs have a destination of NEMS; NEMSINV programs have a destination of NEMSINV and NEMSPCM programs have a destination of NEMSPCM.

- 1. Load the NEMS source library from the dataset
xxMOV.NEMS.PROD.R511.R0902.SRC.

The source programs were unloaded using the Natural utility NATUNLD. The NEMS programs:

- | | |
|-------------|-----------------------------|
| 1. NEMS | Banner Screen |
| 2. NEWLBUN2 | List All Buildings By Name |
| 3. NEWLCUN2 | List All Custodians By Name |
| 4. NEWLUSN2 | List All Users By Name |

will be loaded to the application library NEMS, replacing any existing programs of the same name.

- 2. Load the NEMSINV source library from the dataset:
xxMOV.NEMS.PROD.R511.R0902.SRC.

The source programs were unloaded using the Natural utility NATUNLD. The NEMSINV programs:

1. INV Banner Screen

will be loaded to the application library NEMSINV, replacing any existing programs of the same name.

3. Load NEMSPCM source library from the dataset:
xxMOV.NEMS.PROD.R511.R0902.SRC.

The source programs were unloaded using the Natural utility NATUNLD. The NEMSPCM Programs:

1. PCMMAP Banner Screen

will be loaded to the application library NEMSPCM, replacing any existing programs of the same name.

The source module counts included in this release are listed below:

Natural Source Modules by Type	Count
GLOBAL DATA AREA	0
LOCAL/PARAM DATA AREA	0
MAPS	1
HELP ROUTINES	0
SUBROUTINES	0
SUBPROGRAMS	3
PROGRAMS	2
COPYCODE	0
TEXT	0
PROCESS	0
MISCELLANEOUS OBJECTS	0
Total:	6

2.2 List of Source Code Modifications

The following are the modules added, modified, and deleted.

Added Modules:

1. NEWLBUN2 Subprogram
2. NEWLCUN2 Subprogram
3. NEWLUSN2 Subprogram

Modified Modules:

1. INV Program
2. NEMS Program
3. PCMMAP Map

Deleted Modules:

1. None

3.0 Pre-Predict Data Conversion

Not applicable with this release.

4.0 Install Predict

4.1 Data Dictionary Changes

This release will include the new enhancements for Version 5.1.1. Details for changes in this release can be found under Section 4.1.3 Physical File Changes or by performing Predict reporting on the keyword NEMS-5.1.1.

Use SYSDICBE to load the PREDICT modifications from the dataset:
xxMOV.NEMS.PROD.R511.R0902.PRD.

The following NEMS DDMs should be generated after the PREDICT load is completed.

NEMS-TABLE

4.1.1 Inventory of Objects

The object types and inventory listed below represent a comprehensive count of the Predict object modules for this release.

PREDICT Objects by Type:

Keyword	-	1
ADABAS Files and Views	-	1

4.1.2 Storage Considerations

Not applicable with this release.

4.1.3 Physical File Changes

Invert the following superdescriptors:

NEMS-TABLE		File # 195							
Ty	L	Field ID	F	Length	Occ	D	U	DB	S
*-	-	-----	*-	-----	-----	*	*	--	*
SP	1	TBL-ID-INST-SUB-USER-NAME	A	35.0		D		SE	N
SP	1	TBL-ID-INST-SUB-CUST-NAME	A	35.0		D		SF	N

Using the following commands:

```
//DDKARTE DD *
ADAINV INVERT FILE=195
ADAINV TEMPSIZE=??,SORTSIZE=??
ADAINV SUPDE='SE=TA(1,5),EB(1,30)'
ADAINV SUPDE='SF=TA(1,5),DC(1,30)'
/*
```

5.0 Catalog Source Code

The following modules should be changed before the CATALOG is run. Modules NEMS, INV000P0, and MNUC00P1 need to be modified at each center to contain the correct contact name and phone number for each center. Replace the ?? in MSD008P1 and MSD008P5 with your installation number.

Run a batch job to catalog (CATALL) all modules in the NEMS library using the NASA Batch Standard Parameters replacing the existing PS and LS with the following values: PS=23 and LS=80. It is not necessary to catalog the Global Data Area (GDA).

You should receive 38 NATURAL 0303 errors for modules that begin with RPT* that concern page overflow and 32 programs will produce NATURAL 0002 errors. Program MSC005P1 will not compile. There should be a total of 71 NATURAL errors.

A list of errors found above and dispositions of these results follows:

- To compile the NATURAL 0303 errors correctly, run another CATALOG for the RPT* modules in the NEMS library using the NASA Batch Standard Parameters. You should receive 12 NATURAL 0002 errors. Ignore the 0002 errors because these objects are dynamic.
- The 32 NATURAL 0002 errors from the first CATALOG are to be IGNORED because these objects are dynamic.
- MSX001P1 will only compile for centers that use the NEMS-PRIOR-MONTH file.
- IGNORE any errors for program MSC005P1.

Run a batch job to catalog (CATALL) all modules in the NEMSINV library using the NASA Batch Standard Parameters. It is not necessary to catalog the Global Data Area (GDA). There should be no errors received.

Run an online catalog (CATALL) on module TRNI34P1 and TRNILOP3 to prevent problems with access to the second screen.

Run a batch job to catalog (CATALL) all modules in the NEMSPCM library using the NASA Batch Standard Parameters. It is not necessary to catalog the Global Data Area (GDA). There should be one NATURAL 0043 error received. See Section 9.0 Installation Checklist for instructions on how to correct these errors.

After all objects are compiled, the NEMS application will run under the NASA On-line Standard Parameters.

6.0 Post-Predict Data Conversion

Not applicable with this release.

7.0 Perform Release-Specific Procedures

None

8.0 Local JCL Mods

Other JCL changes may be necessary due to differences in each center's JCL. Changes are in **bold**:

None

9.0 Installation Checklist

- 1.0 Back Up Existing Data
- 2.0 Copy Source
 - 2.1 Copy Source Code
 - 2.2 List of Source Code Modifications
- 3.0 Pre-Predict Data Conversion
- 4.0 Install Predict
 - 4.1 Data Dictionary Change
 - 4.1.1 Inventory of Objects
 - 4.1.2 Storage Considerations
 - 4.1.3 Physical File Changes
- 5.0 Catalog Source Code

Update the Password to the NEMS-PCM-AUTH file in PCM programs: MNUC00P1; MNUC01P1; RPTSUBP1; TRNC00P1; TRNC26P1; TRNC52P1; TRNUPDP1. This step is optional if the Center chooses not to put a password on the NEMS-PCM-AUTH file.

 - A. Find out from your DBA the ADABAS Security password assigned to the NEMS-PCM-AUTH file at your installation.
 - B. Logon to the NEMSPCM and use the Scan utility to search the NEMSPCM programs listed above for the word:
PASSWORD = 'NEMSPCM' and replace it with:
PASSWORD = 'Your site Password'. This scan and replace will change all references to the password with your installation's password.
- 6.0 Post-Predict Data Conversion
- 7.0 Perform Release-Specific Procedures
- 8.0 Local JCL Mods